# FY 2018 BUDGET REQUEST TO THE CONGRESS

# **Defense Nuclear Facilities Safety Board**



June 2, 2017

# GOVERNMENT PERFORMANCE RESULTS ACT (GPRA) MODERNIZATION ACT

#### **GPRA Strategic Planning Reporting Requirements**

The GPRA Modernization Act of 2010 requires each agency to make available on its website a strategic plan establishing general strategic goals and objectives for a period of not less than four years. The Defense Nuclear Facilities Safety Board's (Board) Strategic Plan for Fiscal Years (FY) 2014-2018 is available on the Internet at <a href="www.dnfsb.gov">www.dnfsb.gov</a>. In addition, agencies are required to develop an Annual Performance Plan (APP) covering a two-year period with performance goals that contribute toward achieving the strategic plan's goals and objectives, and an Annual Performance Report (APR) comparing actual performance achieved with the performance goal established. The Board's APP for FY 2017 and FY 2018, as well as its APR for FY 2014 through FY 2016, are included in this Budget Request in accordance with the requirements of Office of Management and Budget Circular A-11.

For a comprehensive review of the Board's activities to improve the safety of the Department of Energy's defense nuclear facilities, see the Board's Annual Reports to Congress, which may be reviewed at the Board's public website (referenced above).

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#### 1. INTRODUCTION

# Defense Nuclear Facilities Safety Board FY 2018 Congressional Budget Request

#### **APPROPRIATION & EXPENSE SUMMARY**

(Tabular in thousands)

#### **OPERATING EXPENSES**

	ACTUAL FOR FY 2016	FINANCIAL PLAN FOR FY 2017	BUDGET REQUEST FOR FY 2018
New Budget Authority	29,150*	29,095	30,600
Obligations	30,743	32,048	31,880
Outlays	28,453	30,125	31,215

<sup>\*</sup> Consolidated Appropriations Act, 2016, Pub. L. No. 114-113

#### **Enabling Statute:**

National Defense Authorization Act, FY 1989, Pub. L. No. 100-456, § 1441, 102 Stat. 1918 (1988), amended the Atomic Energy Act of 1954 (42 U.S.C. § 2286, et seq.)

#### As Amended by:

National Defense Authorization Act, FY 1991, Pub. L. No. 101-510, § 3201, 104 Stat. 1485 (1990). National Defense Authorization Act, FYs 1992 and 1993, Pub. L. No. 102-190, § 3201, 105 Stat. 1290 (1991).

Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992).

National Defense Authorization Act, FY 1994, Pub. L. No. 103-160, § 3201, 107 Stat. 1547 (1993).

Federal Reports Elimination Act of 1998, Pub. L. No. 105-362, 112 Stat. 3280 (1998).

National Defense Authorization Act, FY 2001, Pub. L. No. 106-398, § 3201, 114 Stat. 1654 (2000).

National Defense Authorization Act, FY 2003, Pub. L. No. 107-314, § 3201, 116 Stat. 2458 (2002).

National Defense Authorization Act, FY 2013, Pub. L. No. 112-239, § 3201, 116 Stat. 1632 (2013).

Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act, FY 2015, Pub. L. No. 113-291, §§ 3202-3203, 128 Stat. 3292 (2014).

National Defense Authorization Act, FY 2016, Pub. L. No. 114-92, § 3202, 129 Stat. 726 (2016).

# **Defense Nuclear Facilities Safety Board FY 2018 Congressional Budget Request**

# PERSONNEL SUMMARY

	FY 2016 <u>ACTUAL</u>	FY 2017 FINANCIAL <u>PLAN</u>	FY 2018 BUDGET <u>REQUEST</u>
Statutory Personnel Ceiling: (FTEs)	130	130	130
FTE Usage	107	115	115
Board Members and Permanent Employees at End of Fiscal Year	116	120	120

# **Defense Nuclear Facilities Safety Board FY 2018 Congressional Budget Request**

## PROPOSED APPROPRIATIONS LANGUAGE

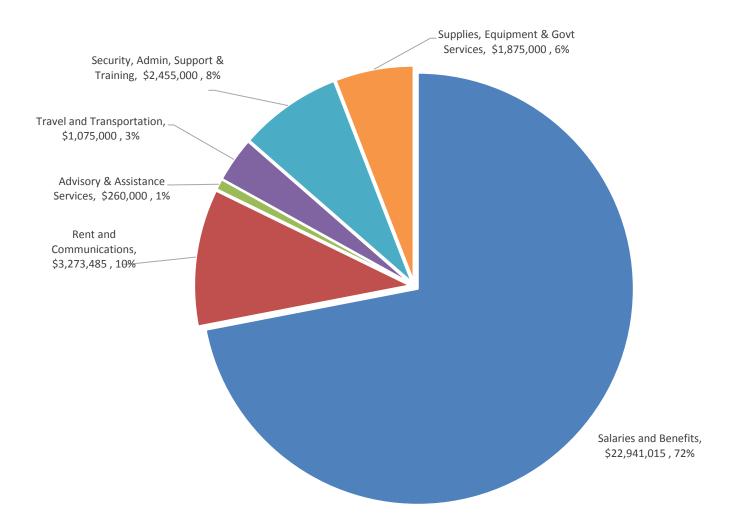
## SALARIES AND EXPENSES

For necessary expenses of the Defense Nuclear Facilities Safety Board in carrying out activities authorized by the Atomic Energy Act of 1954, as amended by Public Law No. 100-456 (section 1441), \$30,600,000 to remain available until September 30, 2019.

# **Defense Nuclear Facilities Safety Board FY 2018 Congressional Budget Request**

# **FY 2018 TOTAL PROJECTED OBLIGATIONS**

FY 2018 Total Projected Obligations = \$31,879,500



# 2. BUDGET REQUEST SUMMARY

The Board's FY 2018 Budget Request for \$30,600,000 includes additional funding for statutory increases in civilian salaries and associated employee benefits (e.g., employer contributions to employee health benefit, retirement accounts, and universal credit monitoring). The Board's funding request is slightly higher than the FY 2016 appropriation.

#### **Exhibit A: The Board's Legislative Mandate**

The Board's specific functions are delineated in its enabling statute at 42 U.S.C.§ 2286a(b):

- The Board shall review and evaluate the content and implementation of the standards relating to the design, construction, operation, and decommissioning of defense nuclear facilities of the Department of Energy (including all applicable Department of Energy orders, regulations, and requirements) at each Department of Energy defense nuclear facility. The Board shall recommend to the Secretary of Energy those specific measures that should be adopted to ensure that public health and safety are adequately protected. The Board shall include in its recommendations necessary changes in the content and implementation of such standards, as well as matters on which additional data or additional research are needed.
- The Board shall investigate any event or practice at a Department of Energy defense nuclear facility that the Board determines has adversely affected, or may adversely affect, public health and safety.
- The Board shall have access to and may systematically analyze design and operational data, including safety analysis reports, from any Department of Energy defense nuclear facility.
- The Board shall review the design of a new Department of Energy defense nuclear facility before construction of such facility begins and shall recommend to the Secretary, within a reasonable time, such modifications of the design as the Board considers necessary to ensure adequate protection of public health and safety. During the construction of any such facility, the Board shall periodically review and monitor the construction and shall submit to the Secretary, within a reasonable time, such recommendations relating to the construction of that facility as the Board considers necessary to ensure adequate protection of public health and safety. An action of the Board, or a failure to act, under this paragraph may not delay or prevent the Secretary of Energy from carrying out the construction of such a facility.
- The Board shall make such recommendations to the Secretary of Energy with respect to Department of Energy defense nuclear facilities, including operations of such facilities, standards, and research needs, as the Board determines are necessary to ensure adequate protection of public health and safety. In making its recommendations, the Board shall consider, and specifically assess, risk (whenever sufficient data exists), and the technical and economic feasibility of implementing the recommended measures.

## **EXHIBIT B: OBLIGATIONS BY FISCAL YEAR**

Budget Account OC	FY16 OBLIGATIONS	FY17 FINANCIAL	FY18 BUDGET
	(ACTUAL)	PLAN	REQUEST
PERSONNEL SALARIES (11)	\$ 14,749,177	\$ 16,430,237	\$ 17,315,286
PERSONNEL BENEFITS (12)	\$ 4,864,991	\$ 5,272,611	\$ 5,625,729
BENEFITS FOR FORMER PERSONNEL (13)	\$ -	\$ 20,000	\$ -
TRAVEL (21)	\$ 944,876	\$ 938,238	\$ 1,050,000
TRANSPORTATION OF THINGS (22)	\$ 38,939	\$ 22,741	\$ 25,000
RENTAL PAYMENTS TO GSA (23.1)	\$ 2,739,736	\$ 2,985,810	\$ 2,998,485
COMMUNICATIONS & UTILITIES (23.3)	\$ 250,879	\$ 229,740	\$ 275,000
PRINTING & REPRODUCTION (24)	\$ 27,724	\$ 30,021	\$ 30,000
ADVISORY & ASSISTANCE SERVICES (25.1)	\$ 359,976	\$ 355,000	\$ 260,000
OTHER SERVICES (25.2)	\$ 4,177,388	\$ 3,530,152	\$ 2,275,000
GOVERNMENT SERVICES (25.3)	\$ 1,145,110	\$ 983,000	\$ 1,075,000
OPERATION & MAINT.OF FACILITIES (25.4)	\$ 16,725	\$ 70,000	\$ 50,000
OPERATION & MAINT.OF EQUIPMENT (25.7)	\$ 40,304	\$ 31,000	\$ 100,000
SUPPLIES & MATERIALS (26)	\$ 200,269	\$ 305,700	\$ 300,000
ACQUISITION OF ASSETS (31)	\$ 1,186,929	\$ 844,073	\$ 500,000
*** TOTAL OBLIGATIONS ***	\$ 30,743,022	\$ 32,048,323	\$ 31,879,500
NEW BUDGET AUTHORITY	\$ 29,150,000	\$ 29,094,586	\$ 30,600,000
UNOBLIGATED BALANCE - PREV. FY	\$ 3,164,661	\$ 2,814,476	\$ 830,242
RECOVERY OF PRIOR YR OBLIGATIONS	\$ 1,242,836	\$ 969,503	\$ 498,876

Budget Account OC	FY16 OBLIGATIONS	FY17 FINANCIAL	FY18 BUDGET
	(ACTUAL)	PLAN	REQUEST
TOTAL BUDGETARY RESOURCES	\$ 33,557,497	\$ 32,878,565	\$ 31,929,118
EST. UNOBLIGATED BAL CUR. FY	\$ 2,814,476	\$ 830,242	\$ 49,618
OUTLAYS	\$ 28,452,536	\$ 30,125,424	\$ 31,214,910
STAFF & BOARD MEMBERS (FTE'S)	107	120	120

#### EXHIBIT B SUMMARY

The following provides detail supporting the Fiscal Year (FY) 2018 amounts in Exhibit B, i.e., describing further how the Board proposes to use the budget resources requested in the following manner:

#### Salaries and Benefits (OC 10)

The FY 2018 request includes funding of \$22,941,015 to support the projected salary and benefit costs for 120 full time equivalents (FTE). The funding for salaries and benefits represents 72 percent of the Board's FY 2018 estimated obligations. In calculating the projected salary and benefits needs of the Board, the following federal pay adjustment and benefits factors for executive branch employees are used:

- Pay increase of 2.1 percent beginning in January 2017.
- Pay increase of 1.9 percent beginning in January 2018.
- Employee benefits of 32 percent of salaries, or \$45,005 per FTE in FY 2018.

Note personnel benefit (OC 12) costs also include other costs (e.g., change of station, public transit subsidies).

In establishing the Board, Congress sought to bring the best talent available to focus on health and safety oversight associated with the design, construction, operation, and decommissioning of Department of Energy (DOE) defense nuclear facilities. The recruitment and retention of scientific and technical staff with outstanding qualifications are the key components in the Board's human capital strategy if the Board is to be successful in accomplishing its mission. The Board has assembled a small and highly talented technical staff with extensive backgrounds in science and engineering disciplines, such as nuclear-chemical processing, conduct of operations, general nuclear safety analysis, conventional and nuclear explosive technology and safety, nuclear weapon safety, storage of nuclear materials and nuclear criticality safety, and waste management. Virtually all of the technical staff has technical master's degrees, and approximately 21 percent hold doctoral degrees. Many of the Board's technical staff members possess practical nuclear experience gained from duty in the U.S. Navy's nuclear propulsion program, the nuclear weapons field, or the civilian reactor industry. In order to accomplish the Board's highly technical mission, it is of paramount importance that the Board receives sufficient funds to meet the salary and benefit requirements of the staff.

The Board enhances its on-site safety oversight of defense nuclear facilities by assigning experienced technical staff members to full-time duty at priority DOE sites. Resident inspectors provide a cost-effective means for the Board to closely monitor DOE activities, and to identify health and safety concerns promptly by having on-site staff conducting first hand assessments of nuclear safety management at the priority sites to which they have been assigned. Resident

<sup>&</sup>lt;sup>1</sup> On October 17, 2016, the Board voted to change the "site representative" title to "resident inspector" in conformance with its enabling legislation. That change was fully implemented by February 24, 2017.

inspectors regularly interact with the public, union members, congressional staff members, and public officials from federal, state, and local agencies.

#### Travel (OC 21)

The Board requests \$1,050,000 to support the official travel of Board members and staff. Extensive travel to the various DOE defense nuclear facilities located throughout the United States is necessary for Board members and staff to conduct first-hand assessments of operations and associated health and safety issues. The Board is required to react to incidents at DOE defense nuclear facilities that may affect public health and safety, requiring unplanned travel expenditures to support its work at these sites. During FY 2018, Board members and staff plan to make 160 team visits to defense nuclear sites in support of its high priority public health and safety oversight mission.

The Board also is authorized to station staff members at DOE sites or facilities to assist in carrying out its functions. The Board has assigned technical staff teams to round-the-clock monitoring of major startup, testing, restart, or other activities at various DOE sites. For example, following the underground vehicle fire and the radiological release at the Waste Isolation Pilot Plant in February 2014, the Board temporarily stationed members of its technical staff at the site to provide continuous oversight of the recovery activities and DOE's accident investigations. The presence of its technical staff has proved to be invaluable in providing the Board with firsthand information on the demonstrated readiness, capabilities, and performance of DOE and its contractors for ensuring safety in the conduct of such activities. The Board anticipates a continued need for technical staff teams to monitor construction and startup of new DOE defense nuclear facilities, such as the Salt Waste Processing Facility in Aiken, South Carolina; the Waste Treatment Plant in Richland, Washington; and the Uranium Processing Facility in Oak Ridge, Tennessee.

The Board also uses travel funds to pay for expenses associated with public hearings and meetings at or near DOE sites, where any interested persons or groups may present comments, technical information, or data concerning health and safety issues under the Board's purview.

#### **Transportation of Things (OC 22)**

The Board has included \$25,000 in its FY 2018 Budget Request - for the shipment of household goods for employees relocating to the Washington, DC, area and/or becoming resident inspectors at DOE facilities.

#### **Rental Payments to GSA (OC 23.1)**

The Board requests funds totaling \$2,998,485 to reimburse the Government Services Administration (GSA) for projected office rental costs based on the rent estimate received from GSA. This overhead expense represents approximately 10 percent of the Board's FY 2018 Budget Request. The Board entered into a new 10-year lease in March 2016.

#### **Communications and Utilities (OC 23.3)**

The Budget Request includes \$275,000 for projected communications support costs. Funds in this account will be used for voice over internet protocol telephone service, smartphone services, Internet access charges (both at the Board's headquarters and its alternate continuity of operations (COOP) location), postage and overnight delivery costs, and special messenger services. The physical COOP space is located at a DOE facility, and all costs necessary for maintaining the readiness of the alternate location are included under this OC.

#### **Printing and Reproduction (OC 24)**

The Budget Request includes \$30,000 for reimbursing the U.S. Government Printing Office for publication of required legal notices in the *Federal Register*. Routine printing and copying charges for Budget Requests, the Board's *Annual Report to Congress*, and technical reports, are also included in this account.

#### **Advisory and Assistance Services (OC 25.1)**

To maintain the Board's highly skilled staff, the FY 2018 Budget Request includes \$260,000 for training of the Board's engineers and scientists.

#### Other Services (OC 25.2)

The Budget Request includes \$2,275,000 to fund a wide range of recurring information technology and administrative support needs of the Board in FY 2018 in such areas as help desk, server administration, physical and cyber security, court reporting, and drug-free workplace testing.

#### **Government Services (OC 25.3)**

The Budget Request includes \$1,075,000 for reimbursable support agreements with other Federal agencies, and increases in other government service provider costs. The Board uses cross-service providers for accounting and payroll processing services consistent with government-wide lines of business objectives, and also uses cross-servicing arrangements for services such as physical security, health unit, employee background investigations for security clearances, Employee Assistance Program services, and the Library of Congress FedLink program for legal and legislative research.

#### **Operation and Maintenance of Facilities (OC 25.4)**

The Board requests \$50,000 for maintaining the Board's facilities (e.g., heating, ventilation, and air conditioning maintenance; building alterations; and plumbing repairs outside the scope of the building lease).

#### **Operation and Maintenance of Equipment (OC 25.7)**

The Board requests \$100,000 for maintaining and repairing Board equipment (e.g., copier maintenance agreements, repair of office equipment), and for storage of household goods for relocated personnel.

#### **Supplies and Materials (OC 26)**

The Board requests \$300,000 for continued access to numerous technical standards databases, legal research services, maintenance of the technical reference information for its library, and for general office supplies and materials.

#### **Acquisition of Assets (OC 31)**

The Board requests \$500,000 in acquisition of assets. This includes \$370,000 for recurring software licenses/maintenance agreements supporting the Board's operations; replacement of outdated office equipment, such as printers and copiers; and minor enhancements to existing software systems. In addition, the Board requests \$125,000 in non-recurring obligations for anticipated IT initiatives, such as better network segmentation to allow us to segregate information in accordance with the National Institute of Standards and Technology framework.

#### 3. ANNUAL PERFORMANCE PLAN

## **Agency and Mission Information**

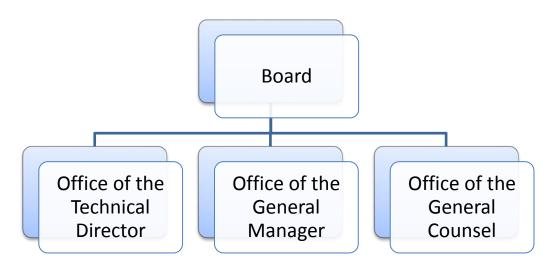
**Overview**. The Board's FY 2018 Annual Performance Plan (APP) and Annual Performance Report (APR) are included here as an integral part of the FY 2018 Budget Request to Congress. The Board's FY 2018 APP aligns with the FY 2018 Budget. In accordance with statutory requirements, the Administration will develop a new strategic plan in 2018 and will determine the objectives it will pursue in the 2018-2022 Strategic Plan.

The FY 2014 through FY 2016 accomplishments shown in the APR align with the Performance Goals published in the Board's Defense Nuclear Facilities Safety Board Strategic Plan, FY 2014-2018.

**Mission Statement.** Per the Board's enabling legislation (42 U.S.C. § 2286a(a)), the mission of the Board is:

to provide independent analysis, advice, and recommendations to the Secretary of Energy to inform the Secretary, in the role of the Secretary as operator and regulator of the defense nuclear facilities of the Department of Energy, in providing adequate protection of public health and safety at such defense nuclear facilities.

**Organizational Structure.** The Board is composed of 120 budgeted Federal FTEs arranged in a relatively flat management structure. More than 80 FTEs are assigned to the Office of the Technical Director (OTD), where they directly carry out the mission of the Board, supported by the Office of the General Manager (OGM) and the Office of the General Counsel (OGC).



## **Strategic Goals and Strategic Objectives**

Based on the mission noted above, the Board proposed the following Strategic Goals and Strategic Objectives. These Goals and Objectives also are repeated in the section of this report entitled "Performance Goals" to show the alignment of the Performance Goals with the Strategic Goals and Strategic Objectives.

- Strategic Goal 1, Improve Safety of Operations: Perform independent oversight of operational safety at DOE's defense nuclear facilities to develop analysis, advice, and recommendations that will inform the Secretary of Energy in providing adequate protection of public health and safety at such defense nuclear facilities.
  - o *Strategic Objective 1.1*—Accomplish independent and timely oversight to strengthen safety of operations involved in the maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.
  - o Strategic Objective 1.2—Accomplish independent and timely oversight to strengthen safety of operations in cleanup of legacy defense nuclear wastes and facilities.
- Strategic Goal 2, Strengthen Safety Standards: Recommend and promote effective safety standards for the Secretary of Energy to apply in providing adequate protection of public health and safety at such defense nuclear facilities.
  - o *Strategic Objective 2.1*—Accomplish independent oversight to strengthen the development, implementation, and maintenance of DOE regulations, requirements, and guidance for providing adequate protection of public health and safety at defense nuclear facilities.
  - o *Strategic Objective 2.2* Accomplish independent oversight to improve the establishment and implementation of safety programs at defense nuclear facilities.
- Strategic Goal 3, Strengthen Safety in Design: Recommend and promote safety in design for new and modified defense nuclear facilities.
  - Strategic Objective 3.1—Accomplish independent oversight to strengthen the use
    of approved nuclear standards in the design and construction of defense nuclear
    facilities and major modifications to existing facilities.
  - o *Strategic Objective 3.2*—Accomplish independent safety oversight to enhance the clear and deliberate implementation of the principles and core functions of integrated safety management in the design, construction, and upkeep of safety systems in defense nuclear facilities.

- Strategic Goal 4, Achieve Excellence in Management and Communication with Stakeholders: Operate in a manner that is accountable to the public and achieves the mission efficiently and effectively.
  - o *Strategic Objective 4.1*—Improve management controls to achieve the Board's mission efficiently and effectively.
  - o *Strategic Objective 4.2* Improve the alignment of human capital strategies with agency mission, goals, and objectives through analysis, planning, investment, measurement, and management of human capital programs.
  - o *Strategic Objective 4.3*—Improve and sustain effective, transparent two-way communications between the Board and its stakeholders on safety issues in DOE's defense nuclear complex and on the Board's operations.

## **Performance Goals**

The Board's Performance Goals for FY 2018 are provided below, showing alignment with the FY 2018 Budget. Senior managers within the agency are identified as "Goal Leaders" for each of the Board's Strategic Objectives.

#### **Strategic Goal 1**

**Strategic Objective 1.1**—Accomplish independent and timely oversight to strengthen safety of operations involved in the maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing. (Group Lead for Nuclear Weapon Programs, OTD)

FY 2017 Performance Goal	FY 2018 Performance Goal
Performance Goal 1.1.1 – Conduct effective oversight through formal, well-planned safety reviews of the National Nuclear Security Administration (NNSA) defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.	Performance Goal 1.1.1 – Conduct effective oversight through formal, well-planned safety reviews of the NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.
Indicator: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.  Target: 10	Indicator: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.  Target: 10
Performance Goal 1.1.2 – Conduct effective oversight through formal, well-planned reviews of NNSA's nuclear explosives safety activities.	Performance Goal 1.1.2 – Conduct effective oversight through formal, well-planned reviews of NNSA's nuclear explosives safety activities.
<b>Indicator:</b> Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.	Indicator: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.
Target: 3	Target: 3
<b>Performance Goal 1.1.3</b> – Notify NNSA of potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations.	<b>Performance Goal 1.1.3</b> – Notify NNSA of potential safety issues <sup>2</sup> at NNSA defense nuclear facilities and in nuclear weapons operations.

<sup>&</sup>lt;sup>2</sup> A safety deficiency that is identified while conducting oversight activities. A safety issue arises when DOE or its contractors are taking actions that differ from requirements in applicable regulations, DOE directives, or national consensus standards; conditions at defense nuclear facilities, or in design documents for planned defense nuclear facilities (or major modifications to existing defense nuclear facilities), differ from requirements in applicable regulations, DOE directives, or national consensus standards; and/or requirements in applicable regulations, DOE directives, or national consensus standards are found to be inadequate.

**Indicator**: Percentage of Board letters regarding potential safety issues sent to NNSA (for which the Board receives a response in the target year) that result in a NNSA assessment of the safety issues.

**Target**: 90% – (measured collectively with goals 1.2.2, 2.2.2, 3.2.2)

**Performance Goal 1.1.4** – Maintain a near-continuous oversight presence at each of the following sites: Los Alamos National Laboratory (LANL), Y-12 National Security Complex (Y-12), and Pantex.

**Indicator**: Number of days per year that a resident inspector or a member of the Board's technical staff conducts safety oversight at each site (LANL, Y-12, and Pantex).

Target: 220

**Indicator**: Percentage of Board letters regarding potential safety issues sent to NNSA (for which the Board receives a response in the target year) that result in a NNSA assessment of the safety issues.

**Target**: 90% – (measured collectively with goals 1.2.2, 2.2.2, 3.2.2)

**Performance Goal 1.1.4** – Maintain oversight presence and cognizance of potential safety issues at the following sites: LANL, Y-12 National Security Complex (Y-12), and Pantex.

**Indicator**: For LANL, Y-12, and Pantex, percentage of weeks that the Technical Staff completes a site report in FY17.

Target: 85%

**Strategic Objective 1.2**—Accomplish independent and timely oversight to strengthen safety of operations in cleanup of legacy defense nuclear wastes and facilities. (Group Lead for Nuclear Materials Processing and Stabilization, OTD)

#### FY 2017 Performance Goal FY 2018 Performance Goal **Performance Goal 1.2.1** –Conduct effective **Performance Goal 1.2.1** –Conduct effective oversight through formal, well-planned safety oversight through formal, well-planned safety reviews of DOE-Office of Environmental reviews of DOE-Office of Environmental Management operating defense nuclear facilities Management operating defense nuclear facilities and facilities undergoing decommissioning and and facilities undergoing decommissioning and decontamination. decontamination. **Indicator**: Number of reviews completed that **Indicator**: Number of reviews completed that comply with the Board's new Technical Staff comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Instructions, Operating Procedures, and Internal Controls. Controls. Target: 10 Target: 10 **Performance Goal 1.2.2** – Notify DOE of **Performance Goal 1.2.2** – Notify DOE of potential safety issues at DOE defense nuclear potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation facilities and in nuclear waste remediation operations. operations. **Indicator**: Percentage of Board letters regarding **Indicator**: Percentage of Board letters regarding potential safety issues sent to DOE (for which the potential safety issues sent to DOE (for which the Board receives a response in the target year) that Board receives a response in the target year) that result in a DOE assessment of the safety issues. result in a DOE assessment of the safety issues.

<b>Target</b> : 90% – (measured collectively with goals 1.1.3, 2.2.2, 3.2.2)	Target: 90% – (measured collectively with goals 1.1.3, 2.2.2, 3.2.2)
<b>Performance Goal 1.2.3</b> –Maintain a near-continuous oversight presence at the Hanford Site and Savannah River Site (SRS).	<b>Performance Goal 1.2.3</b> – Maintain oversight presence and cognizance of potential safety issues at the following sites: Hanford and SRS.
Indicator: Number of days per year that a resident inspector or a member of the Board's technical staff conducts safety oversight at each site (Hanford Site and SRS).  Target: 220	<ul><li>Indicator: For Hanford and SRS, percentage of weeks that the Technical Staff completes a site report in FY17.</li><li>Target: 85%</li></ul>

## **Strategic Goal 2**

**Strategic Objective 2.1**—Accomplish independent oversight to strengthen the development, implementation, and maintenance of DOE regulations, requirements, and guidance for providing adequate protection of public health and safety at defense nuclear facilities. (Group Lead for Nuclear Programs and Analysis, OTD)

FY 2017 Performance Goal	FY 2018 Performance Goal
Performance Goal 2.1.1 – Strengthen DOE's Directives by providing timely oversight and comments to improve revised and newly issued DOE Directives (as noted on the list of "Directives of Interest to the Board").	Performance Goal 2.1.1 – Strengthen DOE's Directives by providing timely oversight and comments to improve revised and newly issued DOE Directives (as noted on the list of "Directives of Interest to the Board").
Indicator: Percentage of DOE Directives entering the review-comment period for which the Board provides comments on or before the Review Date Deadline.	Indicator: Percentage of DOE Directives entering the review-comment period for which the Board provides comments on or before the Review Date Deadline.
Target: 95%	Target: 95%
Performance Goal 2.1.2 – Conduct effective oversight of the implementation of DOE Directives (as noted on the list of "Directives of Interest to the Board") through formal, well-planned safety reviews of DOE defense nuclear facilities.	Performance Goal 2.1.2 – Conduct effective oversight of the implementation of DOE Directives (as noted on the list of "Directives of Interest to the Board") through formal, well-planned safety reviews of DOE defense nuclear facilities.
<b>Indicator</b> : Number of reviews of the implementation of DOE Directives completed that comply with the new Technical Staff Instructions, Operating Procedures, and Internal Controls.	Indicator: Number of reviews of the implementation of DOE Directives completed that comply with the new Technical Staff Instructions, Operating Procedures, and Internal Controls.
Target: 3	Target: 3

**Strategic Objective 2.2**—Accomplish independent oversight to improve the establishment and implementation of safety programs at defense nuclear facilities. (Group Lead for Nuclear Programs and Analysis, OTD)

<b>Performance Goal 2.2.1</b> – Conduct effective	<b>Performance Goal 2.2.1</b> – Conduct effective
oversight through formal, well-planned reviews of	oversight through formal, well-planned reviews of
DOE's establishment and implementation of	DOE's establishment and implementation of
safety programs at defense nuclear facilities.	safety programs at defense nuclear facilities
	including cross cutting reviews.
<b>Indicator</b> : Number of reviews completed that	
comply with the Board's new Technical Staff	<b>Indicator</b> : Number of reviews completed that
Instructions, Operating Procedures, and Internal	comply with the Board's new Technical Staff
Controls.	Instructions, Operating Procedures, and Internal
	Controls.

Target: 4	Target: 4
<b>Performance Goal 2.2.2</b> – Notify DOE of potential actions to improve establishment and implementation of safety programs at DOE defense nuclear facilities.	Performance Goal 2.2.2 – Notify DOE of potential actions to improve establishment and implementation of safety programs at DOE defense nuclear facilities.
<b>Indicator</b> : Percentage of Board letters regarding potential safety issues sent to DOE (for which the Board receives a response in the target year) that result in a DOE assessment of the safety issues.	<b>Indicator</b> : Percentage of Board letters regarding potential safety issues sent to DOE (for which the Board receives a response in the target year) that result in a DOE assessment of the safety issues.
<b>Target</b> : 90% – (measured collectively with goals 1.1.3, 1.2.2, 3.2.2)	<b>Target</b> : 90% – (measured collectively with goals 1.1.3, 1.2.2, 3.2.2)

# **Strategic Goal 3**

**Strategic Objective 3.1**—Accomplish independent oversight to strengthen the use of approved nuclear standards in the design and construction of defense nuclear facilities and major modifications to existing facilities. (Group Lead for Nuclear Facilities Design and Infrastructure, OTD)

FY 2017 Performance Goal	FY 2018 Performance Goal
Performance Goal 3.1.1 – Promote and strengthen the early integration of safety into the design and construction of DOE's defense nuclear facilities by reviewing the adequacy of safety design basis documents at major project Critical Decision milestones.	Performance Goal 3.1.1 – Promote and strengthen the early integration of safety into the design and construction of DOE's defense nuclear facilities by reviewing the adequacy of safety design basis documents at major project Critical Decision milestones.
Indicator: Percentage of significant Hazard Category 2 projects achieving a Critical Decision milestone (CD-1, 2, 3, 4) for which the Board's Technical Staff completes and documents in a staff report a review of the associated safety design basis document.	Indicator: Percentage of significant Hazard Category 2 projects achieving a Critical Decision milestone (CD-1, 2, 3, 4) for which the Board's Technical Staff completes and documents in a staff report a review of the associated safety design basis document.
Target: 100%	<b>Target</b> : 100%
Performance Goal 3.1.2 – Provide early notification to DOE of safety issues at DOE design and construction projects by issuing project letters within 60 days of major Critical Decision milestones to document the Board's assessment of the project's safety strategy and readiness to proceed with the next project stage.	Performance Goal 3.1.2 – Provide early notification to DOE of safety issues at DOE design and construction projects by issuing project letters within 60 days of major Critical Decision milestones to document the Board's assessment of the project's safety strategy and readiness to proceed with the next project stage.
<b>Indicator</b> : The average number of days it takes for the Board to issue a project letter to DOE for	<b>Indicator</b> : The average number of days it takes for the Board to issue a project letter to DOE for

Hazard Category 2 projects achieving a Critical	Hazard Category 2 projects achieving a Critical
Decision milestone (CD-1, 2, 3, 4).	Decision milestone (CD-1, 2, 3, 4).
Target: Within 60 days	Target: Within 60 days

**Strategic Objective 3.2**—Accomplish independent safety oversight to enhance the clear and deliberate implementation of the principles and core functions of integrated safety management in the design, construction, and upkeep of safety systems in defense nuclear facilities. (Group Lead for Nuclear Facilities Design and Infrastructure, OTD)

FY 2017 Performance Goal	FY 2018 Performance Goal	
Performance Goal 3.2.1 – Conduct effective oversight through formal, well-planned reviews of the design, construction, and upkeep of safety	Performance Goal 3.2.1 – Conduct effective oversight through formal, well-planned reviews of the design, construction, and upkeep of safety	
systems at DOE's defense nuclear facilities.  Indicator: Number of reviews completed of safety systems that comply with the Board's new	systems at DOE's defense nuclear facilities.  Indicator: Number of reviews completed of safety systems that comply with the Board's new	
Technical Staff Instructions, Operating Procedures, and Internal Controls.	Technical Staff Instructions, Operating Procedures, and Internal Controls.	
Target: 10	Target: 10	
<b>Performance Goal 3.2.2</b> – Notify DOE of potential safety issues regarding design and construction projects at defense nuclear facilities.	<b>Performance Goal 3.2.2</b> – Notify DOE of potential safety issues regarding design and construction projects at defense nuclear facilities.	
<b>Indicator</b> : Percentage of Board letters regarding potential safety issues sent to DOE (for which the Board receives a response in the target year) that result in a DOE assessment of the safety issues.		
<b>Target</b> : 90% – (measured collectively with goals 1.1.3, 1.2.2, 2.2.2)	<b>Target</b> : 90% – (measured collectively with goals 1.1.3, 1.2.2, 2.2.2)	

# Strategic Goal 4

**Strategic Objective 4.1**—Improve internal management controls to achieve the Board's mission efficiently and effectively.

FY 2017 Goal, Indicator, and Target	FY 2018 Goal, Indicator, and Target		
<b>Performance Goal 4.1.1</b> – Within OTD, develop, implement, and maintain formal procedures and internal controls prescribing effective and efficient safety oversight of DOE defense nuclear facilities.	<b>Performance Goal 4.1.1</b> – Within OTD, develop, implement, and maintain formal procedures and internal controls prescribing effective and efficient safety oversight of DOE defense nuclear facilities.		
Indicator: Percentage completion of implementation of new procedures.	<b>Indicator:</b> Percentage of staff procedures due update in FY 2018 that are re-certified during FY 2018.		
<b>Target:</b> Maintain 100% of existing internal procedures by reviewing and revising internal procedures prior to each procedure's Review date.	Target: 80%		
Performance Goal 4.1.2 – Within OGM, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.	Performance Goal 4.1.2 – Within OGM, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.		
Indicator: Percentage completion of significant OGM work processes with effective procedures.  Target: 96% complete	<b>Indicator:</b> Percentage of administrative directives and operating procedures updated or recertified to reflect current law, regulation, or executive branch guidance.		
	Target: 90% complete		
<b>Performance Goal 4.1.3</b> – Within OGC, develop and implement formal procedures and internal controls prescribing effective and efficient support of the Board's mission.	<b>Performance Goal 4.1.3</b> – Within OGC, update Board regulations and OGC legal guidance prescribing effective and efficient support of the Board's mission.		
Indicator: Percentage completion of implementation of newly developed procedures. This indicator does not include other OGC tasks or completed work.	<ul><li>Indicator: Percentage completion of updated regulations and legal guidance documents.</li><li>Target: 75% of regulations and guidance documents that need updating</li></ul>		
Target: 75% complete			

**Strategic Objective 4.2**— Improve the alignment of human capital management strategies with agency mission, goals, and objectives through workforce analysis, planning, investment, measurement, and management.

FY 2017 Goal, Indicator, and Target	FY 2018 Goal, Indicator, and Target	
<b>Performance Goal 4.2.1</b> – Achieve a more results-oriented performance culture.	<b>Performance Goal 4.2.1</b> – Encourage expanded development opportunities for employees.	
Indicator: Number of employees operating under a performance-based appraisal system.	<b>Indicator:</b> Number of employees participating in full-time professional development opportunities during FY 2018.	
Target: To ensure the continued success of the Board's results-oriented performance culture, develop and implement annual professional development and training opportunities in the areas of performance management and achieving organizational results.	Target: 3	
<b>Performance Goal 4.2.2</b> – Address human capital gaps identified in critical mission functions.	<b>Performance Goal 4.2.2</b> – Address human capital gaps identified in critical mission functions.	
<b>Indicator:</b> Number of unfulfilled critical missions functions.	<b>Indicator:</b> Number of unfulfilled critical missions functions.	
<b>Target:</b> To ensure identified human capital gaps continue to be addressed, develop and implement a structured training and professional development program based on occupation.	<b>Target:</b> To ensure identified human capital gaps continue to be addressed, develop and implement a structured training and professional development program based on occupation.	

**Strategic Objective 4.3**— Improve and sustain effective, transparent two-way communications between the Board and its stakeholders on safety issues in DOE's defense nuclear complex and on the Board's operations.

FY 2017 Performance Goal	FY 2018 Performance Goal	
Performance Goal 4.3.1 – Provide timely communications of safety observations obtained through direct oversight and maintaining cognizance of nuclear facilities at DOE's nuclear weapons sites.	Performance Goal 4.3.1 – Provide timely public and stakeholder communications of safety observations obtained through direct oversight and maintaining cognizance of defense nuclear facilities.	
Indicator: Percentage of resident inspector weekly reports and Site Monthly Reports documenting direct oversight requiring no more than 21 calendar days of processing time by Board staff from the date of report to post to the Board's public website (assumes posting within 35 calendar days of the date of the report based on no more than 14 calendar days of DOE classification review).	Indicator: Technical staff submittal of final resident inspector reports³ within 20 calendar day of report's week ending date.  Target: 90%	
Target: 100%.		
Performance Goal 4.3.2 – Inform the Congress and other stakeholders of potential safety issues early in the design and construction phases of DOE defense nuclear facilities.	Performance Goal 4.3.2 – Inform the Congress and other stakeholders of potential safety issues early in the design and construction phases of DOE defense nuclear facilities.	
Indicator: Number of reports to Congress on the Status of Significant Unresolved Issues with DOE's Design and Construction Projects published and submitted to Congress. Inclusion within the Board's Annual Report to Congress of a separate section bearing this title shall count as a report meeting this goal.	Status of Significant Unresolved Issues with DOE's Design and Construction Projects published and submitted to Congress. Inclusion within the Board's Annual Report to Congress of	
Target: 1	Target: 1	
Performance Goal 4.3.3 – Effectively communicate safety issues by conducting public hearings in communities near DOE defense nuclear facilities and in Washington, DC.	Performance Goal 4.3.3 – Effectively communicate safety issues by conducting public hearings in communities near DOE defense nuclear facilities and in Washington, DC.	
<b>Indicator:</b> Number of public hearings.	Indicator: Number of public hearings.	
Target: 3	Target: 1	

<sup>&</sup>lt;sup>3</sup> Reports where DOE classification review impacts over 5 days will be excluded.

#### **Other Information**

**Major Management Priorities and Challenges.** The Board is pursuing several agencywide initiatives in FY 2018 to address recently identified challenges and new direction provided through congressional legislation. These initiatives include continually improving the agency's internal processes and procedures, continuing to align resources to address the additional workload from IG audits, and effectively managing change, both internal and as a result of changes in the DOE nuclear complex.

Evidence Building/Data Validation and Verification. As a small agency in the executive branch, the Board does not maintain organizational components dedicated to research or evaluation. The Board tracks progress toward meeting its technical performance goals on a quarterly basis by evaluating its progress toward the target for each goal. For example, for Performance Goal 1.2.1, the Nuclear Materials Processing and Stabilization Group Lead determined the number of reviews completed in accordance with the Board's new internal procedures on a quarterly basis. Each group lead completes records of accomplishment to verify the target metric. The Board's Performance Assurance Group compiles the records of accomplishment, compares the information in the records of accomplishment to the established target metrics, and develops a report for the Board's management to provide the status of meeting performance goals.

To complete the records of accomplishment, group leads use data sources that include publicly available correspondence and staff issue reports and internally available information papers and group progress reports; these reports and papers document the activities performed by the Board's staff throughout the year. The Board makes its correspondence, staff issue reports, information papers, and group progress reports readily available to its staff, and the Board employs a robust review process, including factual accuracy checks, for its public reports and internal papers. Therefore, the review process ensures the accuracy of the data.

By tracking its progress toward meeting its performance goals on a quarterly basis, the Board is able to adjust its priorities and resources to meet performance goals.

#### 4. ANNUAL PERFORMANCE REPORT

The FY 2014 through FY 2016 accomplishments shown in the APR align with the Performance Goals established under the Strategic Goals published in the Board's *Defense Nuclear Facilities Safety Board Strategic Plan, FY 2014–2018*, i.e.,

Strategic Goal 1 – Improve Safety of Operations

Strategic Goal 2 – Strengthen Safety Standards

Strategic Goal 3 – Strengthen Safety in Design

Strategic Goal 4 – Achieve Excellence in Management and Communication with Stakeholders

Performance accomplishments for FY 2016 are discussed in detail, including an explanation whenever a target was not met. Actual results for FY 2014 and FY 2015 are also shown, with a brief discussion of the result. A more detailed discussion on FY 2014 and FY 2015 accomplishments, including an explanation whenever a target was not met, can be found in the APR sections of the *FY 2016 and FY 2017 Budget Requests to Congress*, respectively, posted on the Board's website at http://www.dnfsb.gov/about/what-we-do/congressional-budget-requests.

Strategic Goal 1 - Improve Safety of Operations: Perform independent oversight of operational safety of DOE's defense nuclear facilities to develop analysis, advice, and recommendations that will inform the Secretary of Energy in providing adequate protection of public health and safety at such defense nuclear facilities.

Strategic Objective 1.1: Accomplish independent and timely oversight to strengthen safety of operations involved in the maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.

#### **Performance Goal 1.1.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight through formal, well-planned safety reviews of the NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.  Target: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls	Complete 10 reviews	Achieved > 10 Reviews
	Actual Results for Precedin	g Fiscal Years	
2015	Conduct effective oversight through formal, well-planned safety reviews of the NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.	Complete 10 reviews	Achieved 10 Reviews
2014	Conduct effective oversight through formal, well-planned safety reviews of the NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing.	Complete 8 reviews	Achieved 8 Reviews

#### **Discussion:**

The Board's technical staff conducted the following reviews to meet the above objective of conducting effective oversight of NNSA defense nuclear facilities engaged in the maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing. The FY 2016 goal was to complete a minimum of ten safety oversight reviews. That goal was accomplished.

- Lawrence Livermore National Laboratory (LLNL) Safety Basis Process and <u>Implementation of Technical Safety Requirements (TSRs) Review, December 2015</u>. Scope: Reviewed and assessed the implementation of important TSRs and other credited safety controls.
- 2. <u>LLNL Probabilistic Seismic Hazard Analysis Review, May 2016.</u> Scope: Reviewed LLNL's hazard category 2 facilities for seismic resilience. The primary focus was on the Plutonium Facility (B332) and its structural and nonstructural components credited for seismic safety.
- 3. <u>LANL Plutonium Facility (PF-4) Nuclear Operations Restart Pit Flowsheet Federal Readiness Assessment (FRA), November 2015</u>. Scope: Reviewed the DOE Readiness Assessments that were performed as part of the resumption process following the Laboratory Director's operational pause on June 27, 2013.
- 4. <u>LANL Safety Posture of Inappropriate Remediated Nitrate Salt Waste at Area G, June 2016</u>. Scope: Tracked the LANL efforts to characterize the hazard posed by the existing storage configuration and assess any actions taken to stabilize and treat remaining drums of waste.
- 5. Nevada National Security Site (NNSS) Coring Project FRA, March 2016. Scope: Observed the FRA for the new coring project being introduced to the Device Assembly Facility (DAF). This included observing interviews with all coring project management and operations personnel and simulations of coring operations.
- 6. NNSS Review of National Criticality Experiments Research Center (NCERC) Instrumentation and Controls (I&C), August 2016. Scope: I&C subject matter expert reviewed the revision to the NCERC safety basis in order to determine if the I&C issues raised in the August 2010 Board Letter have been resolved.
- 7. Pantex Plant Structural Infrastructure Review, May 2016. Scope: Evaluated the current state of structural infrastructure at Pantex, focusing on facilities authorized for nuclear explosive operations and special nuclear material staging.
- 8. Pantex Plant August 2016 Site-Wide, Full Participation Emergency Exercise, September 2016. Scope: Evaluated the adequacy of the 2015 Pantex Full Participation Exercise and improvements resulting from Recommendation 2015-1.

- 9. <u>Y-12 National Security Complex Building 9212 Confinement Ventilation, June 2016</u>. Scope: Assessed the significance of any gaps, the risk of continued operations, and the effectiveness of actions taken to reduce this risk.
- 10. Y-12 National Security Complex Calciner Critical Decision-1/3A Package and Conceptual Design Review, June 2016. Scope: Evaluated the Calciner Conceptual Design to ensure that all radiological, chemical, and worker hazards had adequate controls to ensure that safety is integrated early in the design.

Additionally, the following staff reviews were completed during FY 2016:

#### **LANL**

- 1. Weapons Engineering Tritium Facility Nuclear Operations Restart
- 2. PF-4 Nuclear Operations Restart Furnace Operations/ARIES/Casting FRA

#### Pantex Plant

- 1. Probabilistic Seismic Hazard Analysis
- 2. 2015/16 Emergency Response Exercise Review
- 3. Software Quality Assurance Implementation Review Weapons Response Code
- 4. Review of Safety Basis Implementation
- 5. W84 FRA

#### Sandia National Laboratory (SNL)

1. Shadow EA-30 Research Reactor Review

#### Y-12 National Security Complex

1. NNSA Production Office Oversight

In FY 2015, the Board's technical staff conducted more than ten reviews to meet the above objective of conducting effective oversight of NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing. The technical staff conducted reviews at all NNSA sites including LANL Area G (Remediated Nitrate Salt-Bearing Waste Storage Phase, LLNL (Conduct of Operations and Maintenance), Pantex (Emergency Management Program), and Y-12 National Security Complex (Highly Enriched Uranium Materials Facility DSA).

In FY 2014, the Board's technical staff conducted more than eight reviews to meet the above objective of conducting effective oversight of NNSA defense nuclear facilities engaged in maintenance of the nuclear weapons stockpile and in weapons-related research, development, and testing. The technical staff conducted reviews at all NNSA sites including LANL Area G (Basis for Interim Operation), NNSS (Conduct of

Operations and Maintenance), Pantex (Electrical Distribution System and Electrical Safety Program), and Y-12 National Security Complex (Criticality Safety).

#### Performance Goal 1.1.2

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight through formal, well-planned reviews of NNSA's nuclear explosive safety activities.	Complete 3 reviews	Achieved > 3 Reviews
	Target: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls		
Actual R	Results for Preceding Fiscal Years		
2015	Conduct effective oversight through formal, well-planned reviews of NNSA's nuclear	Complete 3 reviews	Achieved
	explosive safety activities.		3 Reviews
2014	Conduct effective oversight through formal, well-planned reviews of NNSA's nuclear	Complete 3 reviews	Achieved
	explosive safety activities.		3 Reviews

#### **Discussion:**

The Board's technical staff conducted the following reviews to meet the above objective of effective oversight of NNSA's nuclear explosive safety activities. The FY 2016 goal was to complete a minimum of three safety oversight reviews. That goal was accomplished.

- W87 Nuclear Explosive Safety (NES) Study, June 2016. Scope: Observed the
  meeting of the subject NES study including the demonstrations and deliberations.
  The staff reviewed all input documents for the subject NES study, the study report,
  the presentation of the study report to NNSA management, the NNSA management
  disposition of all NES inadequacies identified, final closure of the NES study and
  authorization of nuclear explosive operations.
- 2. W78 Special Tooling NES Change Evaluation (NCE), September 2016. Scope: Observed the NCE or NES study including any demonstrations and deliberations. The staff reviewed all input documents for the subject NCE or NES study, the study report, the presentation of the study report to NNSA management, the NNSA management disposition of all NES inadequacies identified, final closure of the NES study and authorization of nuclear explosive operations
- 3. <u>PT3854 Electrical Tester NES Study, September 2016</u>. Scope: Ensured 1) that the tester met the requirements of the tester design guide; 2) that the safety study was

conducted in accordance with the DOE Directive for NES and NNSA supplemental guidance; and 3) that the results of the safety study were appropriately captured and conveyed to the NNSA Production Office and Consolidated Nuclear Security contractor.

Additionally, the following staff review was completed during FY 2016:

#### 1. W88 Valve Replacement NCE

In FY 2015, the Board's technical staff conducted three reviews to meet the above objective of effective oversight of NNSA's nuclear explosive safety activities. The technical staff conducted a W80 and B61 A/N Can Electrostatic Discharge NCE, a W87 Tester and W76 Isolator NCE, and UV/IR System Upgrade NCE.

In FY 2014, the Board's technical staff conducted three reviews to meet the above objective of effective oversight of NNSA's nuclear explosive safety activities. The technical staff conducted an Onsite Transportation and Staging NES Master Study review, a review of the W88 NES Operational Safety Review, and an Approved Equipment Program NES Master Study Module II (Special Tooling) review.

#### Performance Goal 1.1.3

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Notify NNSA of potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations.  Target: Percentage of Board letters regarding potential safety deficiencies sent to NNSA (for which the Board receives a response in the target year) that result in a NNSA assessment of the safety issues.	90% (measured collectively with goals 1.2.2, 2.2.2, 3.2.2)	Achieved  100% of letters resulted in NNSA assessment of the safety issue
	Actual Results for Preceding	ng Fiscal Years	
2015	Notify NNSA of potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations.	85% of letters result in positive NNSA response	Achieved  100% of letters resulted in positive NNSA response
2014	Notify NNSA of potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations.	80% of letters result in positive NNSA response	Achieved  100% of letters resulted in positive NNSA response

#### **Discussion:**

The metric used to evaluate this goal is limited to reviews that resulted in official Board correspondence to DOE. Each of the reviews described above resulted in the communication of Board staff concerns to the appropriate DOE/NNSA field office personnel, many of which resulted in DOE/NNSA actions to assess and take action in response to a safety issues. This goal focuses on those issues that were evaluated as significant enough to merit correspondence. Board correspondence can be in the form of a letter that does not request a written response from DOE/NNSA, or in the form of a letter with a reporting requirement or a Board recommendation, both of which require a written response. The correspondence issued to NNSA on potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations, and the response from NNSA received during FY 2016, are listed below:

- 1. Opportunities for Risk Reduction at the LANL Plutonium Facility through Minimization of Material-at-Risk (MAR). Board correspondence date: September 21, 2015. DOE/NNSA response date: None required. NNSA briefed Board members on 13 January, 23 March, 30 March, and 15 July, 2016 regarding actions taken to implement opportunities for MAR minimization. DOE/NNSA completed assessment of the safety issue: Yes.
- 2. <u>Pantex Plant: Deficiencies in the Maintenance Program</u>. Board correspondence date: November 12, 2015. DOE/NNSA response date: None required. DOE/NNSA completed assessment of the safety issue: Yes.
- 3. <u>Safety Issues in the Safety Basis for Tritium Extraction Facility at SRS</u>. Board correspondence date: January 7, 2016. DOE/NNSA response date: None required. DOE/NNSA completed assessment of the safety issue: Yes.
- 4. <u>Seismic Qualification of Fire Suppression System at the Plutonium Facility, LANL</u>. Board correspondence date: May 12, 2016. DOE/NNSA response date: Written response received August 29, 2016. DOE/NNSA completed assessment of the safety issue: Yes.

In FY 2015 and FY 2014, this performance goal was used to track NNSA positive response to Board correspondence. In each year, the correspondence issued to NNSA on potential safety issues at NNSA defense nuclear facilities and in nuclear weapons operations included five specific items of correspondence. Of these, four were determined to result in a positive response from DOE and one was indeterminate.

#### **Performance Goal 1.1.4**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Maintain a near-continuous oversight presence at each of the following sites: LANL, Y-12, and Pantex.  Target: Number of days per year that a site representative or a member of the Board's technical staff conducts safety oversight at each site (LANL, Y-12, and Pantex).	220 days	Achieved  Coverage exceeded the target of 220 days
	Actual Results for Pre	eceding Fiscal Years	
2015	Maintain a near-continuous oversight presence at each of the following sites: LANL, Y-12, and Pantex.	220 days	Not Achieved  Coverage at Pantex less than 220 days
2014	Maintain a near-continuous oversight presence at each of the following sites: LANL, Y-12, and Pantex.	220 days	Achieved  Coverage exceeded the target of 220 days

#### **Discussion:**

The Board's site representatives and technical staff members conducted safety oversight and maintained a near-continuous oversight presence at LANL, Y-12, and Pantex during FY 2016.

- At LANL, the Board's site representatives and technical staff members conducted 224 days of safety oversight, which exceeded the performance goal of 220 days.
- At Y-12, the Board's site representatives and technical staff members conducted 231 days of safety oversight, which exceeded the performance goal of 220 days.
- At Pantex, the Board's site representative and technical staff members conducted 230 days of safety oversight, which exceeded the performance goal of 220 days.

In FY 2015, the Board's site representatives and technical staff members conducted safety oversight and maintained a near-continuous oversight presence at LANL, Y-12, and Pantex. Although coverage at LANL and Y-12 exceeded 220 days, only 218 days of coverage was conducted at Pantex. In FY 2014, coverage at all three site exceeded 220 days.

Strategic Objective 1.2: Accomplish independent and timely oversight to strengthen safety of operations in cleanup of legacy defense nuclear wastes and facilities.

## **Performance Goal 1.2.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight through formal, well-planned safety reviews at DOE-EM operating defense nuclear facilities and facilities undergoing decommissioning and decontamination.  Target: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Control.	Complete 10 reviews	Achieved > 10 Reviews
	Actual Results for Preceding	ng Fiscal Years	
2015	Conduct effective oversight through formal, well-planned safety reviews at DOE-EM operating defense nuclear facilities and facilities undergoing decommissioning and decontamination.	Complete 10 reviews	Achieved 10 Reviews
2014	Conduct effective oversight through formal, well-planned safety reviews at DOE-EM operating defense nuclear facilities and facilities undergoing decommissioning and decontamination.	Complete 8 reviews	Achieved 8 Reviews

## **Discussion:**

The Board's technical staff conducted the following reviews to meet the above objective of conducting effective oversight of DOE-Office of Environmental Management (EM) facilities. The FY 2016 goal was to complete a minimum of ten oversight reviews. That goal was accomplished.

- INL IWTU Safety Instrumented System, November 2015. Scope: This review focused on the INL Integrated Waste Treatment Unit's (IWTU) Safety Instrumented Systems (SIS). The review's lines of inquiry focused on applicable portions of the DSA, design of the SIS, and the Technical Surveillance Requirements including SIS surveillance.
- 2. <u>INL Advance Mixed Waste Treatment Plant (AMWTP) Safety Basis Review, November 2015</u>. Scope: Reviewed INL AMWTP facility nuclear safety basis

- including DOE Idaho (DOE-ID) review and approval. Review led to two Potential Inadequacies in the Safety Analysis (PISA) and a Board letter.
- 3. <u>WIPP ESS/Safety Basis Review, December 2015</u>. Scope: Reviewed the consolidated Evaluation of the Safety of the Situation (ESS) for WIPP in order to determine whether the hazards analysis and control selection adequately protect the public and workers for underground work activities planned prior to resuming waste operations.
- 4. Oak Ridge National Laboratory (ORNL) Transuranic Waste Processing Center (TWPC) Conduct of Operations Review, December 2015. Scope: Evaluated the contractor's (Wastren Advantage, Inc.) programmatic elements and field implementation of conduct of operations and maintenance at ORNL's TWPC, as well as federal oversight by the Oak Ridge Office of Environmental Management (OR-EM). Particular attention was paid to nuclear and high hazard operations (e.g., remote- and contact-handled drum activities) and maintenance activities (e.g., preventive, predictive, or corrective maintenance of safety systems) that supported radioactive waste handling, treatment, packaging, and storage missions. The staff prepared by reviewing safety basis, programmatic, and operational documents, as well as recent assessment reports, and followed up by observing operations and maintenance activities at TWPC.
- 5. <u>Hanford AY-102 Leakage Extent of Condition, January 2016</u>. Scope: Reviewed the actions taken by Department of Energy—Office of River Protection (DOE-ORP) and Washington River Protection Solutions (WRPS) personnel in response to an extent of condition (EOC) assessment of the Hanford Tank Farms, 242-A Evaporator, and 222-S Laboratory hazards analyses.
- 6. <u>WIPP Documented Safety Analysis Rev 5 Review, March 2016</u>. Scope: Reviewed the adequacy of the safety basis documents and safety systems to support safe restart of WIPP TRU waste disposal.
- 7. <u>Hanford REDOX Seismic Review, May 2016</u>. Scope: The 'Reduction-Oxidation' or REDOX facility at Hanford includes the 202-S Canyon building. This canyon is a former fuel processing facility that began operations in 1952, was shut down in 1967, and was deactivated in 1969. The facility is currently in a surveillance and maintenance mode although DOE-Richland Operations Office (DOE-RL) and CH2M-Hill Plateau Remediation Company (CHPRC) personnel have noted that significant migrating contamination within the facility limits areas that are accessible.
- 8. <u>SRS H-Canyon Target Residue, May 2016</u>. Scope: Reviewed the SRS H-Canyon facility nuclear safety basis that supports processing the target residue material (TRM) including limited review of the DOE Savannah River (DOE-SR) review and approval process.

- 9. <u>Hanford Waste Compatibility Program, July 2016</u>. Scope: WCA program is a key safety management program called out by the Tank Farms DSA and ensures that safety basis assumptions of waste properties are protected.
- 10. <u>Hanford WESF K-3 Ventilation System Replacement Review, September 2016</u>. Scope: Reviewed the project to stabilize the Waste Encapsulation and Storage Facility hot cells at the Hanford Site. The project scope included grouting the hot cells and existing high efficiency particulate air (HEPA) filter housings to fix residual contamination in place and installation of a new HEPA filter housing.
- 11. <u>SRS Defense Waste Processing Facility (DWPF) follow-up review, September 2016</u>. Scope: Performed a review of flammable gas hazards at the DWPF at SRS. Follow-up on a previous review that led to two PISAs and a Board letter.
- 12. <u>Hanford Plutonium Finishing Plant (PFP) Demolition Planning and Readiness Activities, August 2016</u>. Scope: Studied the adequacy of CH2M Hill Plateau Remediation Company plans to deactivate and demolish the PFP.
- 13. <u>SRS Nuclear Criticality Safety Program, September 2016</u>. Scope: Reviewed the SRS criticality safety program and H-area implementation and issues.
- 14. <u>WIPP Electrical Systems Follow-up</u>, <u>August 2016</u>. Scope: Assessed physical condition and maintenance of facility level electrical distribution systems supporting surface and underground operations, evaluated resolution of previously identified issues, and discussed impact of implementing a safety-significant ventilation system on normal and backup power requirements.

In FY 2015, the Board's technical staff conducted twenty reviews to meet the above objective of conducting effective oversight of DOE-EM facilities. The technical staff conducted reviews at the Hanford site (6), SRS (3), INL (5), and WIPP (6). In FY 2014, the Board's technical staff conducted eight reviews to meet the above objective of conducting effective oversight of DOE-EM facilities. The technical staff conducted reviews at the Hanford site (3), SRS (3), INL (1), and WIPP (1).

#### Performance Goal 1.2.2

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Notify DOE of potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations.  Target: Percentage of Board letters regarding potential safety deficiencies sent to DOE (for which the Board receives a positive response in the target year) that result in a DOE assessment of the safety issue.	90% (measured collectively with goals 1.1.3, 2.2.2, 3.2.2)	Achieved  100% of letters resulted in NNSA assessment of the safety issue
	Actual Results for Pre	eceding Fiscal Years	
2015	Notify DOE of potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations.	85% of letters result in positive DOE response	Achieved  100% of letters resulted in positive DOE response
2014	Notify DOE of potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations.	80% of letters result in positive DOE response	Achieved  100% of letters resulted in positive DOE response

## **Discussion:**

The metric used to evaluate this goal is limited to reviews that resulted in official Board correspondence to DOE. Each of the reviews described above resulted in the communication of Board staff concerns to the appropriate DOE field office personnel, many of which resulted in action intended to effect improvement. This goal focuses on those issues that were evaluated as significant enough to merit correspondence. Board correspondence can be in the form of a letter that does not request a written response from DOE, or in the form of a letter with a reporting requirement or a Board recommendation, both of which require a written response. The correspondence issued to DOE on potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations, and the response from DOE received during FY 2016, are listed below.

1. <u>Board Recommendation 2012-2 Implementation Plan.</u> Board correspondence date: December 5, 2014. DOE response date: October 26, 2015. DOE/NNSA completed assessment of the safety issue: Yes.

- 2. <u>DWPF Safety Basis Review</u>. Board correspondence date: August 3, 2015. DOE response date: December 16, 2015. DOE/NNSA completed assessment of the safety issue: Yes.
- 3. <u>Recommendation 2012-1 Implementation Progress (SRS Building 235-F)</u>. Board correspondence date: November 10, 2016. DOE response date: January 15, 2016. DOE/NNSA completed assessment of the safety issue: Yes.

In FY 2015 and FY 2014, this performance goal was used to track NNSA positive response to Board correspondence. The Board issued DOE four pieces of correspondence on potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations during FY 2015 and four during FY 2014. All nine pieces of correspondence were assessed to result in a positive response.

## **Performance Goal 1.2.3**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Maintain a near-continuous oversight presence at the Hanford Site and SRS.  Target: Number of days per year that a resident inspector or a member of the Board's technical staff conducts safety oversight at each site (Hanford Site and SRS).	220 days	Achieved  Coverage exceeded the target of 220 days
	Actual Results for Pro	eceding Fiscal Years	
2015	Maintain a near-continuous oversight presence at the Hanford Site and SRS.	220 days	Achieved  Coverage exceeded the target of 220 days
2014	Maintain a near-continuous oversight presence at the Hanford Site and SRS.	220 days	Achieved  Coverage exceeded the target of 220 days

## **Discussion:**

The Board's site representatives and technical staff members conducted safety oversight and maintained a near-continuous oversight presence at Hanford and SRS during FY 2016.

- At Hanford, the Board's site representatives and technical staff members conducted 241 days of safety oversight, which exceeded the performance goal of 220 days.
- At SRS, the Board's site representatives and technical staff members conducted 237 days of safety oversight, which exceeded the performance goal of 220 days.

In both FY 2015 and FY 2014, coverage at each site exceeded the target of 220 days.

Strategic Goal 2 - Strengthen Safety Standards: Recommend and promote effective safety standards for the Secretary of Energy to apply in providing adequate protection of public health and safety at such defense nuclear facilities.

Strategic Objective 2.1: Accomplish independent oversight to strengthen the development, implementation, and maintenance of DOE regulations, requirements, and guidance for providing adequate protection of public health and safety at defense nuclear facilities.

## **Performance Goal 2.1.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Strengthen DOE's Directives by providing timely oversight and comments to improve revised and newly issued DOE Directives (as noted on the list of "Directives of Interest to the Board").  Target: Percentage of DOE Directives entering the review- comment period for which the Board provides comments on or before the Review Date Deadline.	95%	Achieved 100%
	Actual Results for Pre	eceding Fiscal Years	
2015	Strengthen DOE's Directives by providing timely oversight and comments to improve revised and newly issued DOE Directives (as noted on the list of "Orders of Interest to the Board").	95%	Achieved 100%
2014	Strengthen DOE's Directives by providing timely oversight and comments to improve revised and newly issued DOE Directives (as noted on the list of "Orders of Interest to the Board").	90%	Not Achieved 74%

During FY 2016, the Board's staff completed 52 reviews of 59 DOE directives with all of the reviews completed by the Review Date Deadline.

During FY 2015, the Board's staff completed 39 reviews of 35 DOE directives with all of the reviews completed by the Review Date Deadline.

During FY 2014, the Board's staff completed reviews of 27 DOE directives, with 20 of the reviews (74%) completed by the Review Date Deadline. The timeliness of Board reviews of DOE Standards improved significantly after the implementation of new internal control processes at mid-year. During the 3<sup>rd</sup> and 4<sup>th</sup> quarters of the fiscal year, the timeliness response rate to DOE from the Board was nearly 100%.

# **Performance Goal 2.1.2**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight of the implementation of DOE Directives (as noted on the list of "Directives of Interest to the Board") through formal, well-planned safety reviews of DOE defense nuclear facilities.	Complete 3 reviews	Achieved > 3 Reviews
	Target: Number of reviews of the implementation of DOE Directives completed that comply with the new Technical Staff Instructions, Operating Procedures, and Internal Controls.		
	Actual Results for Pre	ceding Fiscal Years	
2015	Conduct effective oversight of the implementation of DOE Directives (as noted on the list of "Directives of Interest to the Board") through formal, well-planned safety reviews of DOE defense nuclear facilities.	Complete 3 reviews	Achieved 3 Reviews
2014	Conduct effective oversight of the implementation of DOE Directives (as noted on the list of "Orders of Interest to the Board") through formal, well-planned safety reviews at DOE defense nuclear facilities.	Complete 2 reviews	Achieved 2 Reviews

In FY 2016, five reviews were completed to provide independent oversight to strengthen the development, implementation, and maintenance of DOE regulations, requirements, and guidance for providing adequate protection of public health and safety at defense nuclear facilities. These reviews covered the following topics:

- 1. NNSS Quality Assurance (QA) Review, December 23, 2015. Scope: Review of compliance with QA and Software Quality Assurance (SQA) requirements and included the QA Program of both the Nevada Field Office and the prime contractor, National Security Technologies, LLC.
- Emergency Exercise Observation at LANL, February 24, 2016. Scope: Initial staff
  review of LANL exercise scenarios, exercise execution and control, emergency
  communications, and facility response.
- 3. <u>Emergency Exercise Observations at INL, September 22, 2016</u>. Scope: Staff review of INL exercise scenarios, exercise execution and control, emergency communications, and facility response.
- 4. <u>Additional Emergency Exercise Observations at LANL, September 8, 2016</u>. Scope: Staff review of LANL site wide exercise scenarios, exercise execution and control, emergency communications, and facility response.
- 5. <u>Emergency Exercise Observation at Hanford, June 23, 2016</u>. Scope: Staff review of Hanford exercise scenarios, exercise execution and control, emergency communications, and facility response.

In FY 2015, three such reviews were completed covering the following topics: 1) Review of the SQA in a Packaging and Transportation Computer Code; 2) Emergent Review of the RadCalc 4.1.1 Safety Calculation Advisory; and 3) SQA Audit of Boston Government Services.

In FY 2014, two such reviews were completed covering the following topics: SNL Conduct of Operations and Maintenance, and SRS SWPF Quality Assurance Program.

Strategic Objective 2.2: Accomplish independent oversight to improve the establishment and implementation of safety programs at defense nuclear facilities.

## **Performance Goal 2.2.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight through formal, well-planned reviews of DOE's establishment and implementation of safety programs at defense nuclear facilities.  Target: Number of reviews completed that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.	Complete 4 reviews	Achieved 4 Reviews
	Actual Results for Pre	ceding Fiscal Years	
2015	Conduct effective oversight through formal, well-planned reviews of DOE's establishment and implementation of safety programs at defense nuclear facilities.	Complete 4 reviews	Achieved 4 Reviews
2014	Conduct effective oversight through formal, well-planned reviews of DOE's establishment and implementation of safety programs at defense nuclear facilities.	Complete 3 reviews	Achieved 3 Reviews

# **Discussion:**

In FY 2016, four reviews were completed to evaluate the establishment and implementation of safety programs at defense nuclear facilities. These reviews covered the following topics:

- 1. <u>Safety Culture Improvement Action at the Hanford Waste Treatment and Immobilization Plant (WTP), October 19, 2015</u>. Scope: Review of the safety culture improvement plans and corrective actions the DOE ORP and WTP Contractor performed.
- 2. <u>2015 Annual Site Emergency Exercise SNL, November 10, 2015</u>. Scope: Review of the Annual Site Emergency Exercise at SNL including pre-exercise training, incident command and emergency operations center, and participant hot wash and evaluator afteraction sessions.

- 3. <u>LANL Emergency Preparedness and Response Program, April 15, 2016</u>. Scope: Review of the LANL EP&R Program including drills and exercises, training, incident command and emergency operations center, and participant hot-wash and evaluator after-action sessions.
- 4. <u>Emergency Exercise Observations at Y-12 National Security Complex, June 10, 2016</u>. Scope: Staff review of Y-12 exercise scenarios, exercise execution and control, emergency communications, and facility response.

In FY 2015, four such reviews were completed covering the following topics: 1) Follow-on Review of LANL Work Planning and Control; 2) Review actions associated with safety culture assessments at WTP in Hanford, Washington; 3) Emergency Preparedness and Response at the Pantex Plant; and 4) DOE's Deliverables on Sustainment Tools for Recommendation 2011-1.

In FY 2014, three such reviews were completed covering the following topics: 1) Hanford Plutonium Finishing Plant Activity-Level Work Planning and Control; 2) Savannah River Nuclear Solutions Activity-Level Work Planning and Control; and 3) DOE Headquarters Emergency Response Function.

# **Performance Goal 2.2.2**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Notify DOE of potential actions to improve establishment and implementation of safety programs at DOE defense nuclear facilities.  Target: Percentage of Board letters regarding potential safety deficiencies sent to DOE (for which the Board receives a response in the target year) that result in a DOE assessment of the safety issues.	90% (measured collectively with goals 1.1.3, 1.2.2, 3.2.2)	Achieved  100% of letters resulted in NNSA assessment of the safety issue
	Actual Results for Pre	eceding Fiscal Years	
2015	Notify DOE of potential actions to improve establishment and	85% of letters result in positive DOE	Achieved
	implementation of safety programs at DOE defense nuclear facilities.	response	100% of letters resulted in positive DOE response

2014	Notify DOE of potential actions to	80% of letters result	Achieved
	improve establishment and	in positive DOE	
	implementation of safety programs at	response	100% of letters
	DOE defense nuclear facilities.		resulted in positive
			DOE response.
			-

The metric used to evaluate this goal is limited to reviews that resulted in official Board correspondence to DOE. Each of the reviews described above resulted in the communication of Board staff concerns to the appropriate DOE headquarters or field office personnel, many of which resulted in action intended to effect improvement. This goal focuses on those issues that were evaluated as significant enough to merit correspondence. Board correspondence can be in the form of a letter that does not request a written response from DOE, or in the form of a letter with a reporting requirement or a Board recommendation, both of which require a written response. The correspondence issued to DOE regarding actions to improve establishment and implementation of safety programs, and the response from DOE during FY 2016, are listed below:

- 1. <u>Recommendation 2015-1, Emergency Preparedness and Response at Pantex</u>. Board correspondence date: November 24, 2015. DOE response date: January 13, 2016. DOE/NNSA completed assessment of the safety issue: Yes.
- 2. <u>Annual Criticality Safety Reporting Requirement Modification</u>. Board correspondence date: February 26, 2016. DOE response date: April 19, 2016. DOE/NNSA completed assessment of the safety issue: Yes.

In FY 2015 and FY 2014, this performance goal was used to track NNSA positive response to Board correspondence. The Board issued DOE four pieces of correspondence regarding actions to improve establishment and implementation of safety programs during FY 2015. All four of those were assessed to result in a positive response. The Board issued DOE three pieces of correspondence regarding actions to improve establishment and implementation of safety programs which were assessed to result in a positive response during FY 2014.

# Strategic Goal 3 - Strengthen Safety in Design: Recommend and promote safety in design for new and modified defense nuclear facilities.

## **Performance Goal 3.1.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Promote and strengthen the early integration of safety into the design and construction of DOE's defense nuclear facilities by reviewing the adequacy of safety design basis documents at major project Critical Decision milestones.  Target: Percentage of significant Hazard Category 2 projects achieving a Critical Decision milestone (CD-1, 2, 3, 4) for which the Board's technical staff completes and documents in a staff report a review of the associated safety design basis document.	100%	Achieved 100% Complete
	Actual Results for Precedi	ng Fiscal Years	
2015	Promote and strengthen the early integration of safety into the design and construction of DOE's defense nuclear facilities by reviewing the adequacy of safety design basis documents at major project Critical Decision milestones.	100%	Achieved 100% Complete
2014	Promote and strengthen the early integration of safety into the design and construction of DOE's defense nuclear facilities by reviewing the adequacy of safety design basis documents at major project Critical Decision milestones.	100%	Achieved 100% Complete

## **Discussion:**

During FY 2016, the Board's technical staff completed and documented reviews of the safety design basis documents for four significant Hazard Category 2 projects that were approaching a Critical Decision milestone. This corresponds to an actual result of 100%. These projects include one that achieved CD-1 preliminary design milestone in December 2015 (WIPP Underground Ventilation System [DOE Project # 15-D-411] and one that expects to achieve CD-2/3 approval date during fiscal year 2017 (LANL Plutonium Facility Equipment Installation Phase 1 [DOE Project # 04-D-125-05]). In the latter case, an Information Paper and review were conducted prior to the CD approval date. The Board staff will continue to follow NNSA's

efforts to integrate safety in design as the PEI project proceeds through design and construction in FY 2017. There were also two projects within the LANL complex that completed reviews on safety design basis documents in anticipation of the CD-4 project completion milestone for each. The projects with their corresponding documents were as follows: Transuranic Waste Facility (DOE Project # 12-D-301-02) DSA review and the Transuranic Liquid Waste Treatment Facility (DOE Project # 07-D-220-03) PSDR review.

During FY 2015, the Board's technical staff completed and documented reviews of the safety design basis document for three significant Hazard Category 2 projects that were approaching a Critical Decision milestone which corresponded to an actual result of 100%. These projects include two that achieved the CD-1 preliminary design milestone: Low Activity Waste Pretreatment System and the Electrorefining piece of the Y-12 Metal Purification Process, a major modification to an existing Hazard Category 2 defense nuclear facility. There were two projects that achieved the CD-4 project completion milestone: the Waste Solidification Building and the SRS Purification Area Vault Project. In the case of the Waste Solidification Building, an oversight review was unnecessary as this project immediately entered cold standby and DOE did not produce an approved DSA.

During FY 2014, the Board's technical staff completed and documented reviews of the safety design basis document for three significant Hazard Category 2 projects that were approaching a Critical Decision milestone which corresponded to an actual result of 100%. These projects include one that achieved the CD-1 preliminary design milestone in October 2014 (Sludge Processing Facility Buildouts), and two that achieved the CD-3 final design milestone during FY 2014 (Transuranic Waste Facility and KW Basin Sludge Removal Project).

## Performance Goal 3.1.2

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Provide early notification to DOE of safety issues at DOE design and construction projects by issuing project letters within 60 days of major Critical Decision milestones to document the Board's assessment of the project's safety strategy and readiness to proceed with the next project stage.  Target: The average number of days for the Board to issue a project letter to DOE for Hazard Category 2 projects achieving a Critical Decision milestone (CD-1, 2, 3, 4).	Within 60 days	Achieved  Average of 57 days.

	Actual Results for Preceding Fiscal Years			
2015	Provide early notification to DOE of safety issues at DOE design and construction	100%	Not Achieved	
	projects by issuing project letters within 60 days of major Critical Decision milestones to document the Board's assessment of the project's safety strategy and readiness to proceed with the next project stage.		66% Complete	
2014	Provide early notification to DOE of safety issues at DOE design and construction projects by issuing project letters in advance of major Critical Decision milestones to document the Board's assessment of the project's safety strategy and readiness to proceed with the next project stage.	100%	Not Achieved 33% Complete	

During FY 2016, the Board issued project letters for two significant Hazard Category 2 projects that were approaching a Critical Decision milestone (CD-1, 2, 3, or 4). These projects include one that achieved the CD-1 preliminary design milestone: WIPP Underground Ventilation System (DOE Project # 15-D-411). Another project letter was written for a project that received a CD-1/3A milestone approval in September of FY 2015: Metal Purification Project Major Modification at Y-12. In both cases, the project letters were completed within 60 days and had a successful average of 57 days. The third project had an info paper that was completed prior to the CD-2/3 milestone approval date for the LANL Plutonium Facility Equipment Installation (DOE Project # 04-D-125-05). A project letter has been drafted and will be sent once a CD approval date is reached in early FY 2017.

During FY 2015, the Board issued project letters for three significant Hazard Category 2 projects that were approaching a Critical Decision milestone. These projects include one that achieved the CD-1 preliminary design milestone: Low Activity Waste Pretreatment System. There were two projects that achieved the CD-4 project completion milestone during FY 2015: the Waste Solidification Building and the SRS Purification Area Vault Project. Two of the project letters were issued within 60 days of the CD milestone. This corresponded to a success rate of 66% for this performance goal.

During FY 2014, the Board issued project letters for three significant Hazard Category 2 projects that were approaching a Critical Decision milestone. These projects included one that achieved the CD-1 preliminary design milestone, Sludge Processing Facility Buildouts, and two that achieved the CD-3 final design milestone, Transuranic (TRU) Waste Facility and KW Basin Sludge Removal Project. One of the project letters was issued in advance of the CD milestone (the FY 2014 target measure), which corresponded to a success rate of 33%.

Strategic Objective 3.2: Accomplish independent safety oversight to enhance the clear and deliberate implementation of the principles and core functions of integrated safety management in the design, construction, and upkeep of safety systems in defense nuclear facilities.

## **Performance Goal 3.2.1**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Conduct effective oversight through formal, well-planned reviews of the design, construction, and upkeep of safety systems at DOE's defense nuclear facilities.  Target: Number of reviews completed of safety systems that comply with the Board's new Technical Staff Instructions, Operating Procedures, and Internal Controls.	Complete 10 reviews	Achieved > 10 Reviews
	Actual Results for Precedi	ng Fiscal Years	
2015	Conduct effective oversight through formal, well-planned reviews of the design, construction, and upkeep of safety systems at DOE's defense nuclear facilities.	Complete 10 reviews	Achieved 10 Reviews
2014	Conduct effective oversight through formal, well-planned reviews of the design, construction, and upkeep of safety systems at DOE's defense nuclear facilities.	Complete 6 reviews	Achieved 6 Reviews

## **Discussion:**

In FY 2016, sixteen reviews of safety systems were completed that comply with the Board's Technical Staff Instructions, Operating Procedures, and Internal Controls. These reviews covered the following topics:

- A System for the Analysis of Soil-Structure Interaction Final Calculation Package
- WTP Emergency Turbine Generators Qualifications
- WTP Process for Delayed Safety-Related Structures, Systems and Components Installation
- INL Probabilistic Seismic Hazard Analysis Update Plan
- Uranium Processing Facility Confinement Strategy
- WTP Pipeline Plugging
- WIPP Permanent Ventilation System
- Salt Waste Processing Facility (SWPF) Radiography Testing

- WTP Analytical Laboratory Facility Preliminary Documented Safety Analysis (PDSA)
   Update
- SWPF Fire Protection Review
- Y-12 Extended Life Program Recommendations
- WTP Preliminary Co-Precipitated Plutonium Criticality Control Strategy
- WTP Direct Feed Low Activity Waste Facility (LAW) PDSA Update (Effluent Management Facility PDSA)
- WTP LAW Design & Operability Report
- LANL Plutonium Facility Technical Area 55 Reinvestment Project Uninterruptible Power Supply
- LAW Confinement Strategy

In FY 2015, ten reviews of safety systems were completed that comply with the Board's Technical Staff Instructions, Operating Procedures, and Internal Controls. These reviews covered topics including Safety Instrumented Systems at SWPF, Confinement Ventilation at the Uranium Processing Facility, and a Nuclear Safety Initiatives Review for the Sludge Treatment Project. There were a total of six reviews performed at WTP. These review topics included Melter Accidents and Hazard Analysis, Seismic Classification of the Confinement Boundary, Hydrogen Control Strategy, and Sampling for Waste Feed Delivery.

In FY 2014, six reviews of safety systems were completed that comply with the Board's Technical Staff Instructions, Operating Procedures, and Internal Controls. These reviews covered topics including Probabilistic Seismic Hazard Analysis at INL and the Hanford Site, aging management of waste transfer lines at SRS, ammonia hazards at Hanford's WTP, and Safety Design Strategy for the High Level Waste Facility at WTP.

## Performance Goal 3.2.2

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Notify DOE of potential safety issues regarding design and construction projects at defense nuclear facilities.  Target: Percentage of Board letters regarding potential safety deficiencies sent to DOE (for which the Board receives a response in the target year) that result in a DOE assessment of the safety issues.	90% (measured collectively with goals 1.1.3, 1.2.2, 2.2.2)	Achieved  100% of letters resulted in NNSA assessment of the safety issue

	Actual Results for Preceding Fiscal Years			
2015	Notify DOE of potential safety issues regarding design and construction projects at defense nuclear facilities.	85% of letters result in positive DOE response	Achieved  100% of letters resulted in positive DOE response.	
2014	Notify DOE of potential safety issues regarding design and construction projects at defense nuclear facilities.	80% of letters result in positive DOE response	Achieved  100% of letters resulted in positive DOE response.	

The metric used to evaluate this goal is applied to reviews that resulted in official Board correspondence to DOE. Each of the reviews described above resulted in the communication of Board to the appropriate DOE field office personnel, many of which resulted in action intended to effect improvement. This goal focuses on those issues that were evaluated as significant enough to merit correspondence. Board correspondence can be in the form of a letter that does not request a written response from DOE, or in the form of a letter with a reporting requirement or a Board recommendation, both of which require a written response. There was one Board letter produced for design and construction projects that applies to the performance goal. In this case, DOE assessed the issue and gave enough information to warrant a positive response. With the addition of the other applicable Board Letters and because this performance goal is measured collectively with performance goals 1.1.3, 1.2.2, and 2.2.2, this metric can be measured at 100 percent for FY 2016.

The correspondence issued to DOE on potential safety issues regarding design and construction projects at DOE defense nuclear facilities, and the response by DOE received during FY 2016, is listed below:

 Board letter establishing a 45 day reporting requirement for a letter regarding DOE's position on controlling river access and protecting public receptors from accidents during Sludge Treatment Project (STP) slurry transfers. Correspondence date: August 21, 2015. DOE response date: November 18, 2015. DOE/NNSA completed assessment of the safety issue: Yes.

In FY 2015 and FY 2014, this performance goal was used to track NNSA positive response to Board correspondence. The Board issued correspondence to DOE on potential safety issues regarding design and construction projects at defense nuclear facilities in eleven different instances during FY 2015. In all letters that required a DOE response, it was determined that the assessment was positive. In FY 2014, the Board issued correspondence to DOE on potential safety issues at DOE defense nuclear facilities and in nuclear waste remediation operations in two instances: the Transuranic Waste Processing Center Sludge Processing Facility Buildouts Project at ORNL, and the Transuranic Waste Facility Project at LANL. In both instances the response was assessed to be positive.

Strategic Goal 4 - Achieve Excellence in Management and Communication with Stakeholders: Operate in a manner that is accountable to the public and achieves the mission efficiently and effectively

## Performance Goal 4.1.1

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result	
2016	Within OTD, develop and implement formal procedures and Internal Controls prescribing effective and efficient safety oversight of DOE defense nuclear facilities.  Target: Percentage completion of implementation of new procedures.	100% complete for Phase 2 procedures	Not Achieved 80% Complete for Phase 2 procedures	
	Actual Results for Preceding Fiscal Years			
2015	Within OTD, develop and implement formal procedures and Internal Controls prescribing effective and efficient safety oversight of DOE defense nuclear facilities.	100% complete for Phase 1 procedures 50% complete for Phase 2 procedures	Achieved  100% Complete for Phase 1 procedures;  50% complete for Phase 2 procedures	
2014	Within OTD, develop and implement formal procedures and Internal Controls prescribing effective and efficient safety oversight of DOE defense nuclear facilities.	100% complete for Phase 1 procedures	Not Achieved 48% Complete	

# **Discussion:**

In FY 2016, the Board completed implementation of four out of the five remaining Phase 2 procedures. The four procedures that were completed and implemented were as follows:

- WP-520.1-0C, Expectations and Guidance for Design and Construction Project Cognizant Engineers
- WP-520.1-0D, Expectations and Guidance for Site Cognizant Engineers
- OP-542.1-5, Developing Board Letters
- OP-532.1-1, Performing Reviews of New or Revised DOE Directives

In FY 2015, the Board completed implementation of Phase 1 documents after completing 48% in FY 2014. This included the majority of the technical staff day-to-day work processes. In addition, the technical staff implemented 50 percent of the Phase 2 documents by the end of the

fiscal year. Phase 1 included 29 Instructions, Operating Procedures, and Notices. The technical staff redefined Phase 2 to include 10 Operating Procedures and Work Practices that support day-to-day work processes. This occurred after an external survey of the staff indicating that the scope of the originally defined documents was too complex. Therefore, the technical staff arrived at a reduced number of documents for Phase 2 by consolidating and combining documents.

# **Information on Unmet Target in FY 2016:**

The Board did not complete an update to technical staff procedure OP-542.1-6, *Developing Board Recommendations*, as planned during FY 2016. This revision was intended to capture operating procedures for evaluating and interacting on DOE Implementation Plans associated with Board Recommendations. A revision to the procedure was drafted consistent with the Board's Policy Statement 1, *Criteria for Judging the Adequacy of DOE Responses and Implementation Plans for Board Recommendations*. However, the procedure was not approved. Late in FY 2016, the National Archives and Records Administration (NARA) released regulations regarding the protection of Controlled Unclassified Information (CUI). The proposed revision to OP-542.1-6 contains steps that involve CUI that need to be aligned with the NARA regulations and guidance. The procedure revision is now planned for FY 2017.

#### Performance Goal 4.1.2

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Within OGM, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.  Target: Percentage completion of significant OGM work processes with effective procedures.	75% Complete	Achieved 77% Complete
	Actual Results for Pre	ceding Fiscal Years	
2015	Within OGM, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.	50% Complete	Achieved 60% Complete
2014	Within OGM, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.	33% Complete	Not Achieved 32% Complete

In FY 2014, OGM embarked on a multi-year goal to assess its operating procedures for significant work processes. The Board's Internal Control Program Operating Procedures identified 25 significant work processes within OGM. Ten work processes received internal control assessments in FY 2014 and were reviewed by the Board's ECIC. Of those, eight or 32 percent (i.e., 8 of 25) were assessed by the ECIC as having effective internal controls. In FY 2015, 13 work processes were assessed for a cumulative total over both years of 16 (seven work processes were assessed both years). Of the 16, 15 or 60 percent (i.e., 15 out of 25) were assessed by the ECIC as having effective internal controls. An additional OGM work process was added in 2016 to bring the total to 26. In FY 2016, 12 of the 26 work processes (3 of which were repeat assessments) were assessed for a cumulative total over all three years of 25. Of the 26, 20 or 77 percent (i.e., 20 out of 26) were assessed as having effective internal controls. Corrective action plans have been established for the remaining work processes with the goal of correcting internal control weaknesses in FY 2017.

#### Performance Goal 4.1.3

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Within OGC, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.  Target: Percentage completion of newly	50% Complete	Achieved 50% Complete
	developed procedures. This indicator does not include other OGC tasks or completed work.		
	Actual Results for Pre	ceding Fiscal Years	
2015	Within OGC, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.	33% Complete	Achieved 36% Complete
2014	Within OGC, develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission.	40% Complete	Not Achieved 21% Complete

Continued staffing shortfalls and emerging work hampered OGC efforts to develop and implement formal procedures and Internal Controls prescribing effective and efficient support of the Board's mission. However, OGC developed targeted procedures for implementation of the Hatch Act, receipt and processing of safety allegations, and alternative dispute resolution. One procedural update to Touhy implementing regulations governing agency employee testimony and the production of agency records in court cases was deferred by the Board to allow support for emerging work. After an assessment and ECIC review of its internal work process for drafting legal memoranda, the planned development of a procedure on drafting legal memoranda was determined to be unnecessary and was cancelled. Implementation of the three developed procedures will require additional work in FY 2017. Completion of development, but not implementation, of the three procedures is assessed as 50 percent of the target measure of completion of the newly developed procedures.

Strategic Objective 4.2 - Improve the alignment of human capital strategies with agency mission, goals, and objectives through analysis, planning, investment, measurement, and management of human capital programs.

## **Performance Goal 4.2.1**

Fiscal Year	Goal Statement	Target Measure, Milestone, or Deliverable	Result
2016	Achieve a more results-oriented performance culture.  Target: Number of employees operating under a performance-based appraisal system.	Develop and implement electronic DN, General Schedule (GS) and Senior Executive Service (SES) performance appraisal systems by August 31, 2016.	Not Achieved

	Actual Results for Preceding Fiscal Years			
2015	Achieve a more results-oriented performance culture.	(1) Implement a Senior Executive Service (SES) performance appraisal system that achieves certification by the Office of Personnel Management (OPM) by September 30, 2015; (2) Implement a revised General Schedule (GS) performance management system that supports a results-oriented performance culture at the Board.	Not Achieved	
2014	Achieve a more results-oriented performance culture.	Develop a revised GS performance management system to ensure higher standards and employee accountability by August 31, 2014.	Ongoing	

The Board implemented a more results-oriented performance-based appraisal system for its excepted service staff (engineers and scientists) in FY 2012, and planned to implement a more results-oriented performance appraisal system for its GS staff in FY 2015, along with achieving a certified SES appraisal system. Those goals were achieved in FY 2016. The Board completed development of a new SES performance appraisal system along with the supporting documentation necessary for OPM review (e.g., a new policy on SES pay). OPM approved system certification in August, 2016 for immediate implementation. The Board also developed a new results-oriented GS performance management system that was approved by OPM in May, 2016. The new system will be implemented for FY 2017 performance, so that in FY 2017 all Board employees will be covered by results-oriented performance management systems.

# **Information on Unmet Target**

The Board conducted market research on available systems and tentatively selected an OPM-offered system that will meet the performance goal objectives; however, implementation is pending final execution of an agreement with OPM and system authorization. It is anticipated the new system will be piloted with SES employees during the 1<sup>st</sup> half of FY 2017, and then rolled out to the rest of the agency before the end of the fiscal year.

#### Performance Goal 4.2.2

Fiscal Year	Goal Statement	Target Measure, Milestone, or Deliverable	Result
2016	Address human capital gaps identified in critical mission functions.  Target: Number of unfulfilled critical mission functions.	Develop a useful and flexible workforce management plan to address human capital gaps identified by the Board's Office Directors for the entire Board and execute the plan by January 1, 2016.	Achieved
	Actual Results for Pre	eceding Fiscal Years	
2015	Address human capital gaps identified in critical mission functions.  Target: Number of unfulfilled critical mission functions.	Develop a useful and flexible workforce management plan to address human capital gaps in the mission critical positions identified by Board's Office Directors for FY 2015 execution.	Achieved
2014	Address human capital gaps identified in critical mission functions.  Target: Number of unfulfilled critical mission functions.	Critical mission functions are defined within each position (entry-, mid-, and senior-career level) by June 30, 2014.	Achieved

# **Discussion**

In FY 2016, the agency planned and executed its most comprehensive and diverse recruitment effort to fill identified mission-critical positions in agency history. Based on identified gaps in the workforce, recruitments and selections for all mission-critical DN positions were performed by the end of the fiscal year. Additionally, based on identified gaps in the OGM workforce, additional resources were requested, justified, and approved in the areas of information technology and security. As a result of agency-wide efforts to recruit and fill mission-critical positions the agency is on target to meet its full-time equivalent budget request of 120 in FY 2017.

In FY 2015, a workforce management plan to address the need to hire for mission critical positions was developed and implemented. The plan was a useful and flexible tool that allowed the use of recruitment resources for targeted positions (e.g., Engineers, IT Security Specialist)

and as a result, the Board was able to hire nine new employees in mission-critical positions and make offers of employment to an additional five engineers with diverse levels of education and experience. In terms of mission-critical positions, FY 2015 was the agency's most successful recruiting year to that date, and much of that success was the result of implementing the workforce management plan that identified the Board's human capital gaps and recommended strategies to address them.

In FY 2014, Human Resources, with input from OTD and OGC, defined the mission-critical functions within each of the Board offices. Additionally, generic core competencies were developed for entry-level, mid-career, and senior-level positions.

Strategic Objective 4.3: Improve and sustain effective, transparent two-way communications between the Board and its stakeholders on safety issues in DOE's defense nuclear complex and on the Board's operations.

## Performance Goal 4.3.1

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Provide timely communications of safety observations obtained through direct oversight and maintaining cognizance of nuclear facilities at DOE's nuclear weapons sites.  Target: Percentage of resident inspector weekly and site monthly reports documenting direct oversight requiring no more than 21 calendar days of processing time by Board's staff from the date of the report to post to the Board's public website (assumes posting within 35 calendar days of the date of the report based on more than 14 calendar days of DOE classification review).	95%	Approximately 66% of reports required no more than 21 calendar day based on data available.
	Actual Results for Pre	eceding Fiscal Years	
2015	Provide timely communications of safety observations obtained through direct oversight and maintaining cognizance of nuclear facilities at DOE's nuclear weapons sites.	85%	Achieved 88.5% posted within 35 days

2014	Provide timely communications of	80%	Achieved
	safety observations obtained through		
	direct oversight and maintaining		89% posted within 35
	cognizance of nuclear facilities at		days
	DOE's nuclear weapons sites.		
	-		

During FY 2016, the Board continued to produce and post resident inspector weekly and site monthly reports on the Board's public website. While all of these reports are posted, the Board did not achieve the timeliness metric identified for FY 2016 based on the data that is available. During FY 2016, the Board was impacted by turnover in security staff and DOE required changes to the work processes involved in this metric. The process for completing timely internal staff review along with external DOE classification and sensitivity reviews has been revised. Based on the revised process, the Board will propose a new metric for FY 2017.

In FY 2015, the Board provided timely communications of safety observations obtained through direct oversight and maintaining cognizance of nuclear facilities at DOE's nuclear weapons sites by posting its resident inspector weekly reports to the Board's public webpage within 35 days of the date of the report. Of the 260 resident inspector weekly reports, the Board posted 230 to its public webpage within 35 days of the date of the report for an overall percentage of 88.5 percent. In FY 2014, the Board posted 229 of 260 resident inspector weekly reports to its public website within 35 days of the date of the report.

## **Information on Unmet Target**

As noted above, this performance goal was impacted by staff turnover and process changes in FY 2017. The Board has implemented a new process for completing timely internal staff review and external DOE classification and sensitivity reviews. The revised process will ensure reports are posted promptly after security reviews are completed.

# **Performance Goal 4.3.2**

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Inform the Congress and other stakeholders of potential safety issues early in the design and construction phases of DOE defense nuclear facilities.  Target: Number of Reports to Congress on the Status of Significant Unresolved Issues with DOE's Design and Construction Projects published and submitted to Congress. Inclusion within the Board's Annual Report to Congress of a separate section bearing this title shall count as a report meeting this goal.	1 report	Achieved  1 report submitted to Congress
	Actual Results for Pro	eceding Fiscal Years	
2015	Inform the Congress and other stakeholders of potential safety issues early in the design and construction phases of DOE defense nuclear facilities.	1 report	Achieved  1 report submitted to Congress
2014	Inform the Congress and other stakeholders of potential safety issues early in the design and construction phases of DOE defense nuclear facilities.	3 reports	Achieved  3 reports submitted to Congress
20134		N/A	2
2012		N/A	2

# **Discussion:**

The Board published its 26<sup>th</sup> Annual Report to Congress on March 30, 2016, and this report included a section titled, Status of Significant Unresolved Issues with DOE's Design and Construction Projects, which satisfied the performance goal.

In FY 2015, the Board published its 25<sup>th</sup> Annual Report to Congress on March 11, 2015, which also included a section titled, Status of Significant Unresolved Issues with DOE's Design and

<sup>4</sup> Although this performance goal was established in FY 2014, the Board has been tracking this measure for multiple years, and thus actual results for FY 2013 and FY 2012 are also included for this goal.

Construction Projects, which satisfied the FY 2015 performance goal. The Board published three Reports to Congress on the Status of Significant Unresolved Technical Differences between the Board and the Department of Energy on Issues Concerning the Design and Construction of DOE's Defense Nuclear Facilities during FY 2014 and submitted them to Congress in December 2013, May 2014, and September 2014.

#### Performance Goal 4.3.3

Fiscal Year	Goal Statement and Target	Target Measure, Milestone, or Deliverable	Result
2016	Effectively communicate safety issues by conducting public hearings in communities near DOE defense nuclear facilities and in Washington, DC.  Target: Number of public hearings.	3 public hearings	Not Achieved 1 public hearing
	Actual Results for Pre	ceding Fiscal Years	
2015	Effectively communicate safety issues by conducting public hearings in communities near DOE defense nuclear facilities and in Washington, DC.	3 public hearings	Achieved 3 public hearings
2014	Effectively communicate safety issues by conducting public hearings in communities near DOE defense nuclear facilities and in Washington, DC.	3 public hearings	Achieved 3 public hearings
2013 <sup>1</sup>		N/A	2
2012		N/A	3

## **Discussion:**

The Board did not satisfy this performance goal in FY 2016. The Board held a public hearing on the topic of LANL Transuranic (TRU) Waste Management, on March 22, 2016, in Santa Fe, New Mexico. The purpose was to gather information regarding hazards to the public and workers by the management of TRU waste at LANL and also examine DOE's actions taken or planned to resolve known inadequacies found in the various TRU waste facilities. In addition to this public hearing, the Board held the following:

- A Business Meeting on November 23, 2015 to discuss the Board's work and staffing plans for FY 2016;
- A closed meeting on December 11, 2015;
- A closed meeting on January 27, 2016;
- A closed meeting on February 28, 2016;
- A closed meeting on April 8, 2016.

The Board satisfied its performance goal in FY 2015 by holding three public hearings. These included public hearings on 1) Safety Culture and Board Recommendation 2011-1; 2) WIPP Safety during Recovery and Resumption of Operations; 3) Improving Safety culture at the Waste Treatment and Immobilization Plant.

The Board satisfied its performance goal in FY 2014 by holding three public meetings. These included public hearings and meetings on 1) *Safety in Design, Operations, and Emergency Preparedness at the Y-12 National Security Complex*; 2) *Safety Culture and Board Recommendation 2011-1*; and 3) *Safety Culture and Board Recommendation 2011-1*.

# **Information on Unmet Target in FY 2016**

Although the Board did not conduct three public hearings, the Board increased its efforts to engage in other activities that inform the public and other stakeholders about safety issues. These activities included meetings with citizen's groups, briefings to DOE and NNSA leadership, engagement with key Congressional Committees and Member offices, and meetings with state and local officials.